STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor

May 28, 2002

**CERTIFIED MAIL #7000 1530 0005 5348 5806**

Gary O'Donnell
Plant Manager
IBP Inc.
P.O. Box 9346
Boise, ID 83707

RE: AIRS Facility No. 001-00030, IBP Inc., Kuna, Idaho
(Final Tier II Operating Permit)

Dear Mr. O'Donnell:

The Department of Environmental Quality (Department) is issuing Tier II operating permit No. 001-00030 for the IBP Inc. facility located in Kuna, in accordance with IDAPA 58.01.01.400 through 406, *Rules for the Control of Air Pollution in Idaho*.

The enclosed Tier II operating permit is based on the information contained in your permit application and on the relevant comments received during the public comment period. This Tier II permit is effective immediately and supersedes your previous permit issued on February 26, 1996 and amended on November 26, 1996. Modification to and/or renewal of this Tier II permit shall be requested in a timely manner in accordance with the *Rules*.

Matt Stoll of the Boise Regional Office will contact you regarding a meeting with the Department to discuss the permit terms and requirements. The Department recommends attendance of your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

You, as well as any other entity, may have the right to appeal this final agency action pursuant to IDAPA 58.01.23 *(Rules of Administrative Procedure Before the Board of Environmental Quality)*. A petition may be filed with the Hearings Coordinator, Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255, within 35 days of the date of this decision. However, the Department encourages you to contact us to discuss any concerns you may have with the enclosed permit prior to filing a petition for a contested case.

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If you have any questions regarding the terms or conditions of the enclosed permit, please contact Mike Simon at (208) 373-0502 or msimon@deq.state.id.us.

Sincerely,

Katherine B. Kelly
Administrator
Air Quality Division

KK/CZ/tk Project No. T2-000700 G:\AIR PERMITS\T 2\IBP\FINAL PREP\T2-000700 PERMIT LETTER.DOC
Enclosure

cc: Matt Stoll, Boise Regional Office
Sherry Davis, Technical Services
Laurie Kral, EPA Region 10
Rechelle Holloway, IBP

| | |
|---|---|
| **Air Quality**<br>**TIER II OPERATING PERMIT**<br>**State of Idaho**<br>**Department of Environmental Quality** | **PERMIT NO.:** 001-00030<br>**AQCR:** 64 **CLASS:** SM<br>**SIC:** 2011 **ZONE:** 11<br>**UTM COORDINATE (km):** 559.6, 4809.5 |

| | | | |
|---|---|---|---|
| **1. PERMITTEE**<br>IBP Inc. – Kuna | | | |
| **2. PROJECT**<br>Tier II Operating Permit | | | |
| **3. MAILING ADDRESS**<br>800 Stevens Port Dr. – Suite 709 | **CITY**<br>Dakota Dunes | **STATE**<br>SD | **ZIP**<br>57049-8710 |
| **4. FACILITY CONTACT**<br>Rechelle Hollowaty | **TITLE**<br>Air Pollution Control Engineer | **TELEPHONE**<br>(605) 235-3647 | |
| **5. RESPONSIBLE OFFICIAL**<br>Gary O'Donnell | **TITLE**<br>Plant Manager | **TELEPHONE**<br>(208) 345-6660 | |
| **6. EXACT PLANT LOCATION**<br>16 Miles South of Boise on South Cole Road, Kuna, Idaho | | **COUNTY**<br>Ada | |
| **7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS**<br>Beef Packing and Rendering | | | |

**8. PERMIT AUTHORITY**

This permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400, and pertains only to emissions of air contaminants, which are regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (Department) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be a modification. Modifications are subject to Department review in accordance with Section 58.01.01.200 of the *Rules for the Control of Air Pollution in Idaho*.

**KATHERINE B. KELLY, ADMINISTRATOR, AIR QUALITY DIVISION**
**DEPARTMENT OF ENVIRONMENTAL QUALITY**

**DATE ISSUED:** **MAY 28, 2002**

**DATE EXPIRES:** **MAY 28, 2007**

KK/CZ/tk

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# LIST OF ACRONYMS

| | |
|---|---|
| AQCR | Air Quality Control Region |
| ASTM | American Society for Testing and Materials |
| CO | Carbon Monoxide |
| EPA | United States Environmental Protection Agency |
| gr/dscf | Grains per Dry Standard Cubic Foot |
| hp | Horsepower |
| IDAPA | Idaho Administrative Procedures Act |
| km | Kilometer |
| lb/d | Pounds per Day |
| lb/hr | Pounds per Hour |
| MMBtu/hr | Million British Thermal Units per Hour |
| $NO_x$ | Nitrogen Oxides |
| O&M | Operations and Maintenance |
| ORP | Oxidation Reduction Potential |
| $PM_{10}$ | Particulate Matter with an Aerodynamic Diameter of 10 Micrometers or Less |
| ppm | Parts Per Million |
| $SO_2$ | Sulfur Dioxide |
| T/yr | Tons Per Year |
| VOC | Volatile Organic Compound |

# 1. TIER II OPERATING PERMIT SCOPE

## *Purpose*

1.1 This is a renewal of a Tier II operating permit. An upgraded scrubber system is incorporated in this permit. The primary purpose of this permit is to establish facility-wide requirements to protect ambient air quality standards and to limit emissions below Title V permitting requirements.

1.2 This Tier II permit supersedes the Tier II Operating Permit No. 001-00030 issued February 26, 1996.

## *Regulated Sources*

1.3 Table 1.1 below lists all sources of emissions that are regulated in this Tier II operating permit:

**Table 1.1 Regulated Sources**

| Permit Section | Source Description | Emissions Control(s) |
|---|---|---|
| 3.0 | East and west boilers, Superior, 25.2 MMBtu/hr each, No. 1 or No. 2 fuel oil or natural gas | None |
| 4.0 | Two generators and one fire pump | None |
| 5.0 | Hide up-puller | Cyclone scrubber |
| 6.0 | Inedible/blood scrubbing system, including:<br>Cookers 1-5<br>Prepress<br>Expellers 1-4 (vents)<br>Inedible Centrifuge<br>4 tallow tanks<br>Blood feed screw vent<br>Milling screw conveyors (2 points)<br>Grease centrifuge<br>Raw blood tank<br>Crax bin*<br>Lo pro transfer to storage bin*<br>Crax hammermill*<br>Crax rotex screen*<br>Crax milling screw vent<br>Blood centrifuge<br>Blood dryer (emissions from blood )<br>Blood dryer (emissions from natural gas combustion)<br>Edible centrifuge | Spray tower(knockout)/venturi/ packed-bed scrubber |
| 7.0 | Meat and bone meal silo and airlocks | Meat and bone meal silo baghouse |
| 8.0 | Blood silo | Blood silo baghouse |
| 9.0 | Blood silo airlocks | Blood silo airlock baghouse (new in summer 2001) |

* These sources are open to room air. It is estimated that 60% of the emissions are controlled by the enclosure of the building. The remaining emissions are captured by room fans and sent to the packed bed scrubber.

## *Other Sources*

1.4 Table 1.2 identifies all other air pollution emitting sources at the facility that do not require specific permit conditions to demonstrate compliance with applicable air quality standards.

**Table 1.2 Other air pollution sources at the facility**

| Source Description |
|---|
| Natural gas space heaters of less than or equal to 5 MMBtu/hr, totaling less than 30 MMBtu/hr |
| Propane space heaters of less than or equal to 5 MMBtu/hr |
| Onsite gas and fuel oil tanks |
| Aerosol can puncturing system |
| Carcass acid wash |
| Leg wash |
| Fugitive emissions from loadouts, including Lo pro unloading |
| Blood hammermill |
| Fuel tanks |
| Pasteurization cabinet |

## 2. FACILITY-WIDE CONDITIONS

The following table contains a summary of requirements that apply generally to emissions units at the facility:

**Table 2.1 Facility–wide Summary**

| Permit Conditions | Parameter | Permit Limit/Standard Summary | Applicable Requirements Reference | Monitoring & Recordkeeping Requirements |
|---|---|---|---|---|
| 2.1 | Fugitive Dust | Reasonable Control | IDAPA 58.01.01.650-651 | 2.2, 2.3 |
| 2.4 | Odors | Reasonable Control | IDAPA 58.01.01.775-776 | 2.5 |
| 2.6 | Opacity | 20% for more than three minutes in any 60 minute period | IDAPA 58.01.01.625 | |
| 2.9 | Fuel Burning | 0.015 gr/dscf for gas<br>0.050 gr/dscf for liquid | IDAPA 58.01.01.676-677 | |
| 2.10 | Fuel Sulfur Content | 0.3% for Grade 1<br>0.5% for Grade 2 | IDAPA 58.01.01.728 | 2.11 |

gr/dscf = grains per dry standard cubic foot

### *Facility Emissions*

2.1 All reasonable precautions shall be taken to prevent particulate matter from becoming airborne in accordance with IDAPA 58.01.01.650-651.

**[IDAPA 58.01.01.650-651, 5/1/94]**

2.2 Unless specified elsewhere in this permit, the permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.

**[IDAPA 58.01.01.405.01, .07, 5/1/94]**

2.3 Unless specified elsewhere in this permit, the permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall, at a minimum, include the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

**[IDAPA 58.01.01.405.01, .07, 5/1/94]**

### *Odors*

2.4 No person shall allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.

**[IDAPA 58.01.01.775-776, 5/1/94]**

2.5 Unless specified elsewhere in this permit, the permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall, at a minimum, include the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken. Within 15 days of receiving an odor complaint, the permittee shall send a copy of the record, including all items referenced above, to the Department.

**[IDAPA 58.01.01.405.01, .07 (State-only), 5/1/94]**

### *Visible Emissions*

2.6 No person shall discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas is the only reason(s) for the failure of the emission to comply with the requirements of this section.

**[IDAPA 58.01.01.625, 4/5/00]**

### *Excess Emissions*

2.7 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.

**[IDAPA 58.01.01.130-136, 4/5/00]**

### *Reports and Certifications*

2.8 Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 N. Orchard
Boise, ID 83706-2239

### *Fuel-burning Equipment*

2.9 The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 grains per dry standard cubic foot (gr/dscf) of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

**[IDAPA 58.01.01.676-677, 5/1/94]**

### *Sulfur Content*

2.10 No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

2.10.1 ASTM Grade 1 fuel oil - 0.3% by weight.

2.10.2 ASTM Grade 2 fuel oil - 0.5% by weight.

**[IDAPA 58.01.01.728, 5/1/94]**

2.11 The permittee shall maintain purchase records or equivalent information from the fuel supplier that indicates the sulfur content of the fuel oil for each delivery to the facility. A compilation of the most recent five years of this information shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

# 3. EAST AND WEST BOILERS

3.1 Process Description

IBP, Inc. has two boilers. Each boiler, manufactured by Superior, is rated at 25.2 MMBtu/hr and can be fired on No. 1 or No. 2 fuel oil or natural gas. The boilers produce steam and hot water for the whole facility.

## *Emissions Limits*

3.2 Emissions Limits

Particulate matter with aerodynamic diameter less than or equal to a nominal 10 micrometers ($PM_{10}$), sulfur dioxide ($SO_2$), and oxides of nitrogen ($NO_x$) emissions from the boilers shall not exceed any corresponding emission rate limits listed in Appendix A of this permit.

**[IDAPA 58.01.01.405.01, 5/1/94]**

3.3 Opacity Limit

Emissions from each boiler stack, or any other stack, vent, or functionally equivalent opening associated with the boilers, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625, *Rules for the Control of Air Pollution in Idaho*. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625, 4/5/00]**

3.4 Grain-loading Limit

The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.015 grains gr/dscf of effluent gas corrected to 3% oxygen by volume for gas or 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid.

**[IDAPA 58.01.01.676-677, 5/1/94]**

## *Operating Requirements*

3.5 Operating Requirements

The east and west boilers shall be fueled with No. 1 fuel oil, No. 2 fuel oil, and natural gas exclusively.

**[IDAPA 58.01.01.405.01, 5/1/94]**

3.6 Throughput Limits

The maximum annual throughput of No. 1 and No. 2 fuel oil by the east and west boilers combined shall not exceed 2,600,000 gallons per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

3.7 Fuel Oil Sulfur Content

The sulfur content in the No. 2 fuel oil (ASTM Grade 2) supplied to the boilers shall not exceed 0.5% by weight.

The sulfur content in the No. 1 fuel oil (ASTM Grade 1) supplied to the boilers shall not exceed 0.3% by weight.

**[IDAPA 58.01.01.728, 5/1/94]**

## *Monitoring and Recordkeeping Requirements*

3.8 Throughput Monitoring

Each month, the permittee shall monitor and record the throughput of fuel oil for that month and for the most recent 12-month period. A note shall be made to the record indicating each day one or both of the boilers are not in operation. The note shall be made no later than two days following the period of non-operation. A compilation of the most recent five years of data shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

# 4. TWO GENERATORS AND FIRE PUMP

4.1 Process Description

IBP Inc. has two electric generators and one fire pump of rated capacities of 0.17 MMBtu/hr, 0.15 MMBtu/hr, and 136 horsepower (hp) (0.35 MMBtu/hr), respectively. The generators and the fire pump use diesel fuel. Emissions from the generators and the fire pump are uncontrolled.

## *Emissions Limits*

4.2 Emissions Limits

Particulate matter with aerodynamic diameter less than or equal to a nominal 10 micrometers, $SO_2$, and $NO_x$ emissions from the generators and fire pump shall not exceed any corresponding emission rate limits listed in Appendix A of this permit.

**[IDAPA 58.01.01.405.01, 5/1/94]**

4.3 Opacity Limit

Emissions from each generator and fire pump stack, or any other stack, vent, or functionally equivalent opening associated with the generators and fire pump, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625, 4/5/00]**

4.4 Grain-loading Limit

The permittee shall not discharge to the atmosphere from any fuel-burning equipment particulate matter in excess of 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid.

**[IDAPA 58.01.01.676-677, 5/1/94]**

## *Operating Requirements*

4.5 Hours of Operation Limits

The maximum annual hours of operation for each generator and the fire pump shall not exceed 500 hours per unit per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

4.6 Fuel Oil Sulfur Content

The sulfur content in the No. 2 fuel oil (ASTM Grade 2) supplied to the generators and fire pump shall not exceed 0.5% by weight.

The sulfur content in the No. 1 fuel oil (ASTM Grade 1) supplied to the generators and fire pump shall not exceed 0.3% by weight.

**[IDAPA 58.01.01.728]**

## *Monitoring and Recordkeeping Requirements*

4.7 Monitor Operating Parameters

The hours of operation of each generator and the fire pump shall be monitored and recorded monthly, when operating. A compilation of the most recent five years of records shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## 5. HIDE UP-PULLER AND CYCLONE SCRUBBER

5.1 Process Description

IBP Inc. has a hide up-puller which pulls the hide off the carcass after it has been separated by air pressure. The rated capacity of the hide up-puller is 200 hides per hour. Vacuum hoods capture dust and loose hair created by the process.

5.2 Control Description

A cyclone scrubber controls the particulate emissions from the dust and loose hair created by the process.

### *Emissions Limits*

5.3 Emissions Limits

The cyclone scrubber's $PM_{10}$ emissions shall not exceed any corresponding emission rate limits listed in Appendix A of this permit.

**[IDAPA 58.01.01.405.01, 5/1/94]**

5.4 Opacity Limit

Emissions from the scrubber stack, or any other stack, vent, or functionally equivalent opening associated with the hide up-puller, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625, 4/5/00]**

### *Operating Requirements*

5.5 Hours of Operation Limits

The maximum annual hours of operation of the hide up-puller shall not exceed 2,800 hours per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

5.6 Monitoring Equipment

The permittee shall maintain and operate, in accordance with the manufacturer specifications, equipment to measure the pressure differential across the cyclone scrubber and to measure the scrubbant flow rate to the cyclone scrubber.

**[IDAPA 58.01.01.405.01, 5/1/94]**

5.7 Control of Odors

No emissions of odorous gases or solids from the cyclone scrubber stack shall be emitted in such quantities as to cause air pollution, as required by IDAPA 58.01.01.775 and IDAPA 58.01.01.835.

**[IDAPA 58.01.01.775 and IDAPA 58.01.01.835]**

## *Monitoring and Recordkeeping Requirements*

5.8 Monitor Operating Parameters

A compilation of the most recent five years of records shall be kept onsite, in a log, and shall be made available to Department representatives upon request. A note shall be made to the record indicating each day the hide up-puller or the cyclone scrubber are not in operation. The note shall be made no later than two days following the period of non-operation. The permittee shall monitor and record the following information once daily, when operating.

- The hours of operation of the hide up-puller.
- Pressure drop across the cyclone scrubber.
- Scrubbant flow rate to the cyclone scrubber.

5.9 Operations and Maintenance Manual Requirements

Within 60 days after issuance of this permit, the permittee shall have updated the operations and maintenance (O&M) manual for the hide up-puller cyclone scrubber which describes the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the air pollution control device. At a minimum, the manual shall include specification for the pressure drop across the cyclone scrubber and the scrubbant flow rate to the cyclone scrubber. This manual shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

# 6. INEDIBLE/ BLOOD SYSTEM

## 6.1 Process Description

A list of all inedible/blood system sources that have emissions ducted to the control equipment can be found in Table 1.1. This includes a blood dryer, which is a 2.6 MMBtu/hr natural gas-fired rotary kiln with a maximum rated input capacity of 4,100 pounds of raw blood per hour. The dried blood is pneumatically conveyed to storage. Two grinders, five cookers, and four expellers are also included. The viscera are ground into small pieces and fed into the cookers. The cookers are heated by steam generated from the boilers.

## 6.2 Control Description

Emissions from the inedible/blood system, which includes the equipment and processes listed in Table 1.1 are controlled by a spray tower (also called a knockout tower), a venturi scrubber, and a packed tower connected in series. A few of the processes' emissions are contained within the three rooms of the rendering building. The air from each room is ducted directly to the packed tower.

### *Emissions Limits*

## 6.3 Emissions Limits

The packed tower scrubber stack's $PM_{10}$, $SO_2$, and $NO_X$ emissions shall not exceed any corresponding emissions rate limits listed in Appendix A of this permit.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## 6.4 Opacity Limit

Emissions from the packed tower scrubber stack, or any other stack, vent, or functionally equivalent opening associated with the inedible/blood system, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625 (*Rules for the Control of Air Pollution in Idaho*). Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625, 4/5/00]**

### *Operating Requirements*

## 6.5 Throughput Limits

The maximum daily throughput of the meat and bone meal produced shall not exceed 192 tons per day. The maximum annual throughput of the meat and bone meal produced shall not exceed 70,080 tons per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

The maximum daily throughput of the finished blood produced shall not exceed 33 tons per day. The maximum annual throughput of the meat and bone meal produced shall not exceed 12,045 tons per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## 6.6 Spray Knockout Tower

- Pressure drop across the spray tower shall be maintained within O&M manual specifications. Documentation of the pressure drop specifications shall remain onsite at all times and shall be made available to Department representative upon request.

- Liquid flow rate to the spray tower shall be maintained within O&M manual specifications. Documentation of the operating liquid flow rate specifications shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

6.7 Venturi Scrubber

- Pressure drop across the venturi scrubber shall be maintained within O&M manual specifications. Documentation of the manufacturer specifications shall remain onsite at all times and shall be made available to Department representative upon request.

- Liquid flow rate to the venturi scrubber shall be maintained within O&M manual specifications. Documentation of the operating liquid flow rate specifications shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

6.8 Packed Tower

- Pressure drop across the packed tower shall be maintained within O&M manual specifications. Documentation of the O&M specifications shall remain onsite at all times and shall be made available to Department representative upon request.

- Liquid flow rate to the packed tower shall be maintained within O&M manual specifications. Documentation of the O&M specifications shall remain onsite at all times and shall be made available to Department representatives upon request.

- The pH and residual chlorine shall be maintained in accordance with the O&M manual.

**[IDAPA 58.01.01.405.01, 5/1/94]**

6.9 Monitoring Equipment

The permittee shall maintain and operate, in accordance with manufacturer specifications, equipment to measure the pressure differential across the air pollution control equipment; the scrubbant flow rate to the spray tower, venturi scrubber, and the packed tower; the pH and oxidation reduction potential (ORP) for the packed tower.

**[IDAPA 58.01.01.405.01, 5/1/94]**

6.10 Control of Cookers

- The facility shall comply with IDAPA 58.01.01.775, 776, and 835 through 838.

- The spray tower, the venturi scrubber, and the packed tower shall be connected in series.

**[IDAPA 58.01.01.405.01, 5/1/94]**

6.11 Control of Expellers

All expellers shall be properly hooded and all exhaust gases shall be ducted to odor control equipment as required by IDAPA 58.01.01.837.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## *Monitoring and Recordkeeping Requirements*

6.12 Throughput Monitoring

For each day, when operating, the permittee shall monitor and record the data used to determine the throughput of meat and bone meal and of finished blood. A note shall be made to the record indicating each day that there is no throughput of meat and bone meal or of finished blood. The note shall be made no later than two days following the period of non-operation. Each month, the daily records shall be compiled to show the monthly throughput of meat and bone meal and of finished blood for the previous month and for the most recent 12-month period. A compilation of the most recent five years of data shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

6.13 Air Pollution Control Equipment Monitoring

The following parameters shall be monitored and recorded once daily, except for residual chlorine, which shall be monitored and recorded once weekly. A note shall be made to the record indicating each day the requirements of Permit Conditions 6.13.1 through 6.13.4 are not tracked due to non-operation of the system. A note shall be made to the record indicating each week the requirements of Permit Condition 6.13.5 are not tracked due to non-operation of the system. A compilation of the most recent five years of records shall be kept onsite and shall be made available to Department representatives upon request.

- Pressure drop across the spray tower, venturi scrubber, and the packed tower.
- Scrubbant flow rate to the spray tower, venturi scrubber, and the packed tower.
- pH for packed tower scrubbant.
- , ORP for packed tower scrubbant.
- Monitor and record residual chlorine once weekly for the packed tower.

**[IDAPA 58.01.01.405.01, 5/1/94]**

6.14 Operations and Maintenance Manual Requirements

Within 60 days after startup, the permittee shall have updated the O&M manual for the spray tower, the venturi scrubber, and the packed tower which describes the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the most recent upgrades of the air pollution control device. This manual shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

# 7. MEAT AND BONE MEAL SILO AND AIRLOCKS

7.1 Process Description

Meat and bone meal are pneumatically conveyed to the meat and bone meal silo. Material is dropped from the silo through sleeves into trucks or railcars. Airlocks are located at both the rail and truck loadouts.

7.2 Control Description

The meat and bone meal silo and airlock $PM_{10}$ emissions are controlled by a baghouse with a $PM_{10}$ control efficiency of 99%.

## *Emissions Limits*

7.3 Emissions Limits

The meat and bone meal silo and airlock baghouse stack $PM_{10}$ emissions shall not exceed any corresponding emission rate limits listed in Appendix A of this permit.

**[IDAPA 58.01.01.405.01, 5/1/94]**

7.4 Opacity Limit

Emissions from the meat and bone meal baghouse stack, or any other stack, vent, or functionally equivalent opening associated with the meat and bone meal silo and airlocks shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625, *Rules for the Control of Air Pollution in Idaho*. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625]**

## *Operating Requirements*

7.5 Throughput Limits

Silo

The maximum daily throughput into the meat and bone meal silo shall not exceed 192 tons per day. The maximum annual throughput into the meat and bone meal silo shall not exceed 70,080 tons per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

Loadout

The maximum daily throughput of the meat and bone meal loadout shall not exceed 292 tons per day. The maximum annual throughput of the meat and bone meal loadout shall not exceed 70,080 tons per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

7.6 Baghouse Pressure Drop

The pressure drop across the baghouse shall be maintained within O&M manual specifications. Documentation of the operating pressure drop specifications for the baghouse shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## *Monitoring and Recordkeeping Requirements*

7.7 Throughput Monitoring

Silo

For each day, when operating, the permittee shall monitor and record the data that will be used to determine the throughput into the meat and bone meal silo. A note shall be made to the record indicating each day there is no throughput into the meat and bone meal silo. The note shall be made no later than two days following the period of non-operation. Each month, the daily records shall be compiled to show the daily throughput into the meat and bone meal silo for the previous month and for the most recent 12-month period. A compilation of the most recent five years of data shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

Loadout

For each day, when operating, the permittee shall monitor and record the data that will be used to determine the throughput of meat and bone meal loadout. A note shall be made to the record indicating each day there is no loadout of meat and bone meal from the silo. The note shall be made no later than two days following the period of non-operation. Each month, the daily records shall be compiled to show the daily throughput of meat and bone meal loadout for the previous month and for the most recent 12-month period. A compilation of the most recent five years of data shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

7.8 Monitor Operating Parameters

A compilation of the most recent five years of records shall be kept onsite, in a log, and shall be made available to Department representatives upon request. The permittee shall monitor and record the pressure drop across the baghouse once daily, when operating. A note shall be made to the record indicating each day the baghouse is not in operation. The note shall be made no later than five days following the period of non-operation.

**[IDAPA 58.01.01.405.01, 5/1/94]**

7.9 Operations and Maintenance Manual Requirements

Within 60 days after issuance of this permit, the permittee shall have updated the O&M manual for the meat and bone meal baghouse which describes the procedures that will be followed to comply with General Provision 2 and the manufacturer specification for the air pollution control device. At a minimum, the manual shall include specifications for the pressure drop across the baghouse. This manual shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## 8. BLOOD SILO

8.1 Process Description

Finished blood is pneumatically conveyed to the blood silo.

8.3 Control Description

Emissions from the blood silo are controlled by a baghouse with a $PM_{10}$ control efficiency of 99%.

### *Emissions Limits*

8.3 Emissions Limits

Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers from the blood silo baghouse stack shall not exceed any corresponding emissions rate limits listed in Appendix A of this permit.

**[IDAPA 58.01.01.405.01, 5/1/94]**

8.4 Opacity Limit

Emissions from the blood silo baghouse stack, or any other stack, vent, or functionally equivalent opening associated with the blood silo, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625 (*Rules for the Control of Air Pollution in Idaho*). Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625, 4/5/00]**

### *Operating Requirements*

8.5 Throughput Limits

The maximum daily throughput into the blood silo shall not exceed 33 tons per day. The maximum annual throughput into the blood silo shall not exceed 12,045 tons per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

8.6 Baghouse Pressure Drop

The pressure drop across the baghouse shall be maintained within manufacturer and O&M manual specifications. Documentation of the operating pressure drop specifications for the baghouse shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

### *Monitoring and Recordkeeping Requirements*

8.7 Throughput Monitoring

For each day, when operating, the permittee shall monitor and record the data that will be used to determine the throughput into the blood silo. A note shall be made to the record indicating each day there is no throughput into the blood silo. The note shall be made no later than two days following the period of non-operation. Each month, the daily records shall be compiled to show the daily throughput into the blood silo for the previous month and for the most recent 12-month period. A compilation of the most recent five years of data shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

8.8 Monitor Operating Parameters

A compilation of the most recent five years of records shall be kept onsite, in a log, and shall be made available to Department representatives upon request. The permittee shall monitor and record the pressure drop across the baghouse once daily, when operating. A note shall be made to the record indicating each day that the baghouse is not in operation. The note shall be made no later than two days following the period of non-operation.

**[IDAPA 58.01.01.405.01, 5/1/94]**

8.9 Operations and Maintenance Manual Requirements

Within 60 days after issuance of this permit, the permittee shall have updated the O&M manual for the blood silo baghouse which describes the procedures that will be followed to comply with General Provision 2 and the manufacturer specifications for the air pollution control device. At a minimum, the manual shall include specification for the pressure drop across the baghouse. This manual shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## 9. BLOOD SILO AIRLOCKS

9.1 Process Description

Finished blood from the blood silo is dropped from the silo through sleeves into trucks or railcars. Airlocks are located at both the rail and truck loadouts.

9.2 Control Description

The blood silo airlock $PM_{10}$ emissions are controlled by a baghouse which was installed in the summer of 2001 and has a control efficiency of 99% for $PM_{10}$.

### *Emissions Limits*

9.3 Emissions Limits

The blood silo airlock baghouse stack's $PM_{10}$ emissions shall not exceed any corresponding emissions rate limits listed in Appendix A of this permit.

**[IDAPA 58.01.01.405.01, 5/1/94]**

9.4 Opacity Limit

Emissions from the blood silo airlock baghouse stack, or any other stack, vent, or functionally equivalent opening associated with the blood silo airlock, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625, *Rules for the Control of Air Pollution in Idaho*. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

**[IDAPA 58.01.01.625, 4/5/00]**

### *Operating Requirements*

9.5 Throughput Limits

The maximum hourly throughput of the blood silo loadout shall not exceed 103 tons per day. The maximum annual throughput of the blood silo loadout shall not exceed 12,045 tons per any consecutive 12-month period.

**[IDAPA 58.01.01.405.01, 5/1/94]**

9.6 Baghouse Pressure Drop

The pressure drop across the baghouse shall be maintained within manufacturer and O&M manual specifications. Documentation of the operating pressure drop specifications for the baghouse shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## *Monitoring and Recordkeeping Requirements*

9.7 Throughput Monitoring

For each day, when operating, the permittee shall monitor and record the data that will be used to determine the throughput of the finished blood loadout. A note shall be made to the record indicating each day there is no loadout of finished blood. The note shall be made no later than two days following the period of non-operation. Each month, the daily records shall be compiled to show the daily throughput of the finished blood loadout for the previous month and for the most recent 12-month period. A compilation of the most recent five years of data shall be kept onsite and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

9.8 Monitor Operating Parameters

A compilation of the most recent five years of records shall be kept onsite, in a log, and shall be made available to Department representatives upon request. The permittee shall monitor and record the pressure drop across the baghouse once daily, when operating. A note shall be made to the record indicating each day that the baghouse is not in operation. The note shall be made no later than two days following the period of non-operation.

**[IDAPA 58.01.01.405.01, 5/1/94]**

9.9 Operations and Maintenance Manual Requirements

Within 60 days after issuance of this permit, the permittee shall have updated the O&M manual for the blood silo airlock baghouse which describes the procedures that will be followed to comply with General Provision 2 and the manufacturer specification for the air pollution control device. At a minimum, the manual shall include specification for the pressure drop across the baghouse. This manual shall remain onsite at all times and shall be made available to Department representatives upon request.

**[IDAPA 58.01.01.405.01, 5/1/94]**

## 10. APPENDIX A – EMISSION RATE LIMITS

The following table provides a summary of all emission rate limits required by this permit.

**Table 10.1 IBP Inc., Kuna, Emission Limits**

| IBP Inc., Kuna<br>Emission Limits[a] – Hourly (lb/hr[d]), Daily (lb/d[e]), and Annual[b] (T/yr[f]) | | | | | | |
|---|---|---|---|---|---|---|
| **Source Description** | **$PM_{10}$[c]** | | **$NO_x$** | | **$SO_2$** | |
| East Boiler | 0.6 lb/hr | 2.29 T/yr | 3.6 lb/hr | 14.9 T/yr | 12.8 lb/hr | 46.16 T/yr |
| West Boiler | 0.6 lb/hr | 2.29 T/yr | 3.6 lb/hr | 14.9 T/yr | 12.8 lb/hr | 46.16 T/yr |
| Generators and Fire Pump (Combined) | 0.58 lb/hr | 0.14 T/yr | 8.1 lb/hr | 2.025 T/yr | 0.54 lb/hr | 0.134 T/yr |
| Hide Up-Puller | 0.12 lb/hr | 0.17 T/yr | | | | |
| Inedible/Blood System | 16.4 lb/d | 3.00 T/yr | 6.41 lb/d | 1.17 T/yr | 0.62 lb/d | 0.12 T/yr |
| Meat and Bone Meal Silo and Airlocks | 0.12 lb/d | 0.02 T/yr | | | | |
| Blood Silo | 0.01 lb/d | 0.002 T/yr | | | | |
| Blood Silo Airlock | 0.063 lb/d | 0.004 T/yr | | | | |

[a]As determined by a pollutant-specific U.S. EPA reference method, a Department-approved alternative, or as determined by the Department's emission estimation methods used in this permit analysis.

[b]As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

[c]Includes condensables.

[d]Pounds per hour

[e]Pounds per day

[f]Tons per year

## 11. APPENDIX B – FACILITY-WIDE EMISSIONS INVENTORY

The following table provides a summary of the emissions inventory of the facility based on potential to emit. The emissions inventory table is provided for informational purposes only.

**Table 11.1 Emission inventory based on potential to emit.**

| IBP Inc., Kuna Potential Emission[a]–Annual[b] (T/yr[d]) | | | | | |
|---|---|---|---|---|---|
| **Source Description** | **$PM_{10}$[c]** | **$NO_x$** | **CO** | **VOC** | **$SO_2$** |
| East Boiler | 2.29 | 14.9 | 9.09 | 0.6 | 46.16 |
| West Boiler | 2.29 | 14.9 | 9.09 | 0.6 | 46.16 |
| Generators and Fire Pump (Combined) | 0.14 | 2.025 | 0.44 | 0.17 | 0.13 |
| Hide Up-Puller | 0.17 | | | | |
| Inedible/Blood System | 3.00 | 1.17 | 1.00 | 2.98 | 0.12 |
| Meat and Bone Meal Silo and Airlocks | 0.02 | | | | |
| Blood Silo | 0.002 | | | | |
| Blood Silo Airlock | 0.004 | | | | |
| **Total** | 7.9 | 32.99 | 19.6 | 4.35 | 92.57 |

[a]As determined by a pollutant-specific U.S. EPA reference method, a Department-approved alternative, or as determined by the Department's emissions estimation methods used in this permit analysis.

[b]As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

[c]Includes condensables.

[d]Tons per year

## 12. TIER II PERMIT GENERAL PROVISIONS

1. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emission of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code 39-101 et seq.

2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.

3. The permittee shall allow the Director, and/or his authorized representative(s), upon the presentation of credentials:

   - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit; and

   - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emissions testing (i.e., performance tests) in conformance with state-approved or accepted EPA procedures when deemed appropriate by the Director.

4. Except for data determined to be confidential under Section 9-342A *Idaho Code*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Department of Environmental Quality.

5. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.

6. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter; a copy of which shall be forwarded to the Director.

7. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.

8. The Director may require the permittee to develop a list of operation and maintenance procedures to be approved by the Department. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.

9. Performance tests (i.e.; air emissions source tests) conducted pursuant to testing requirements in this permit must be conducted in accordance with IDAPA 58.01.01.157. Such testing shall not be conducted on weekends or state holidays unless the permittee obtains prior Department approval.

   The permittee shall submit to the Department for approval a proposed test date for each performance test required by this permit at least 15 days prior to each respective test date (including each test date for periodic tests such as, for example, annual tests). The permittee shall promptly notify the Department of any change in the proposed test date and shall provide at least five workdays advanced notice prior to conducting any rescheduled test, unless the Department approves a shorter notice period.

Within 30 days of the date on which a performance test required by this permit is concluded, the permittee shall submit to the Department a performance test report for the respective test. The performance test report shall include any and all process operating data required to be recorded during the test period as well as the test results, raw test data, and associated documentation.

The maximum allowable source operating rate shall be limited to 120% of the average operating rate attained during the most recent performance test conducted pursuant to this permit, for which a test protocol has been granted prior approval by the Department, which demonstrated compliance with the respective pollutant emission limit unless; (1) a more restrictive operating limit is specified elsewhere in this permit or; (2) at such an operating rate, emissions would exceed any emission limit(s) set forth in this permit.

10. The provisions of this permit are severable; and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.